

Supporting Information

Metallacarboranes as tunable redox potential electrochemical indicators for screening of gene mutation.

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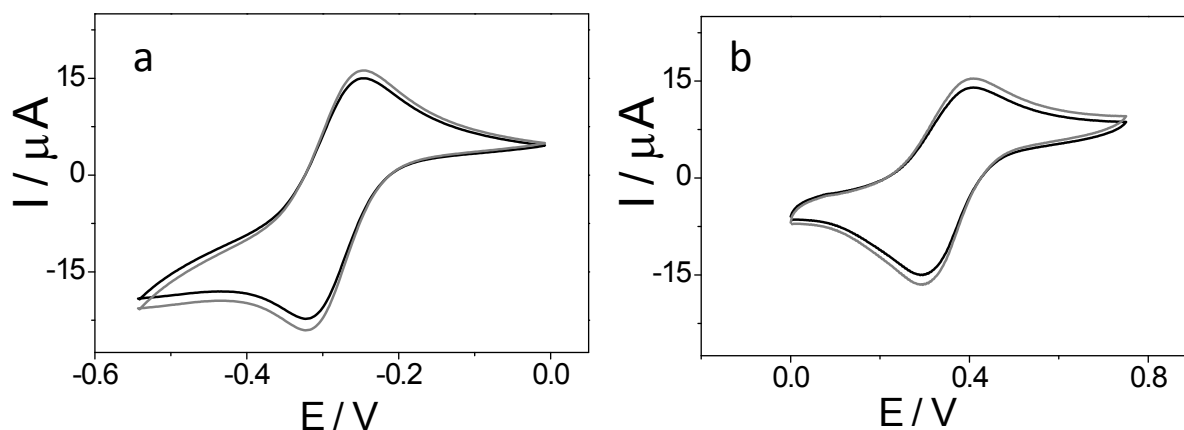


Figure 1 SI. Cyclic voltammograms of 1.0 mM of $\text{Na}[\text{FESANE}]$ (a) and $\text{Na}[\text{Cl}_6\text{-FESANE}]$ (b) in 0.1 M PB pH 7.0 solution (black curve) and 0.1 M PB pH 7.0 solution + 0.4 M NaCl (grey curve) at a AuSPE. Scan rate: 100 mV s^{-1} .

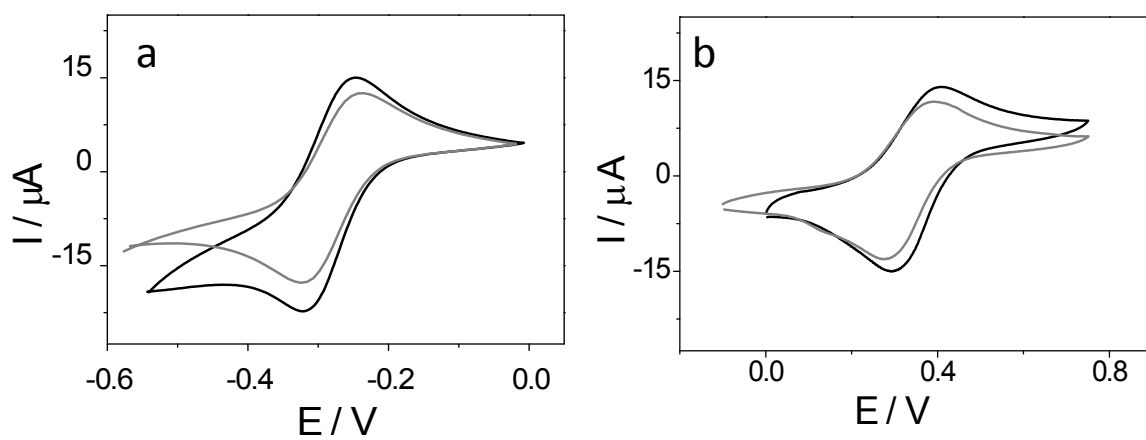
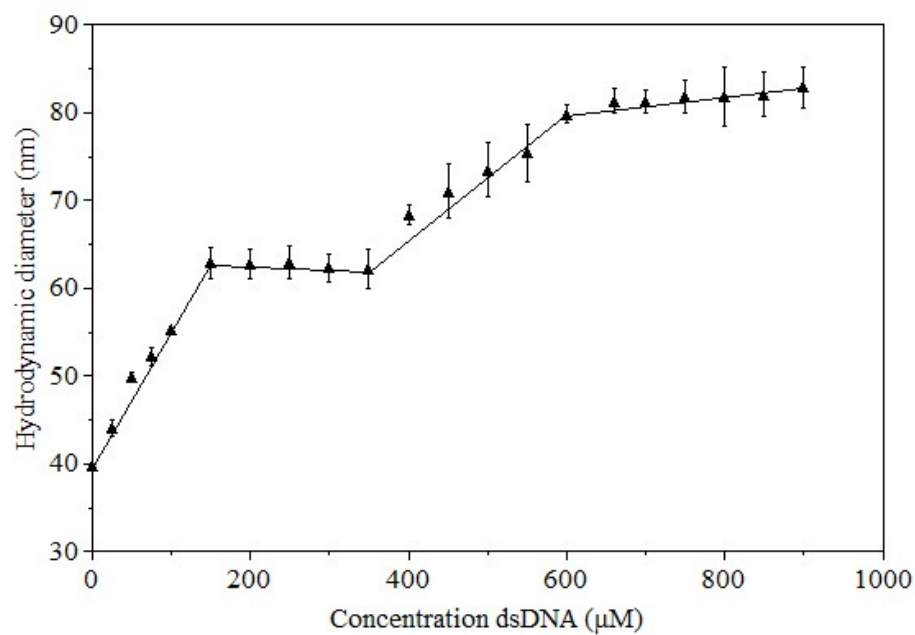


Figure 2 SI. Cyclic voltammograms of 1.0 mM of $\text{Na}[\text{FESANE}]$ (a) and $\text{Na}[\text{Cl}_6\text{-FESANE}]$ (b) in absence (black curve) and in presence of CT-dsDNA 500 μM (grey curve) in 0.1 M PB pH 7.0 solution at a AuSPE. Scan rate: 100 mV s^{-1} .



3 SI. Graphical representation of the hydrodynamic diameter (nm) of Na [FESANE] aggregates in aqueous 1.0 mM solution measured by DLS versus increasing concentrations of CT-dsDNA in water in the concentration range from 0 to 900 μM .

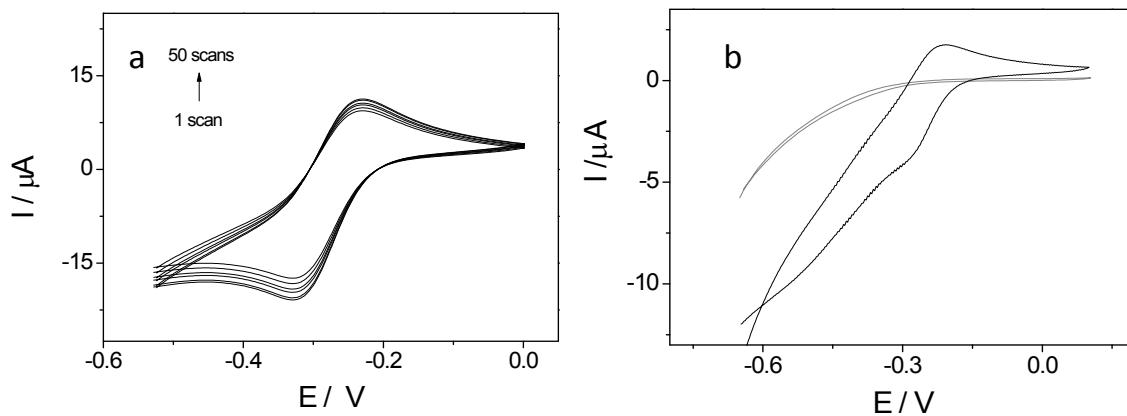


Figure 4 SI. a) Consecutive cyclic voltammograms of $1.0 \text{ mM Na[FESANE]}$ in $0.1 \text{ M PB pH } 7.0$ solution at a CT-dsDNA/AuSPE. b) Cyclic voltammogram in $0.1 \text{ M phosphate buffer pH } 7.0$ solution at a CT-dsDNA/AuSPE before (grey curve) and after the accumulation of Na[FESANE] by consecutive cyclic scans (black curve). Scan rate: 100 mV s^{-1} .

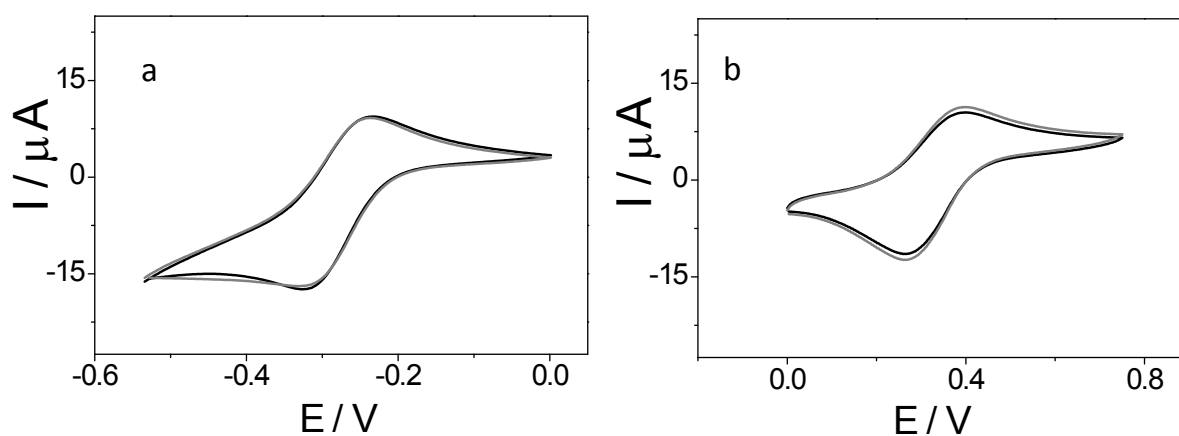


Figure 5 SI. Cyclic voltammograms of 1.0 mM Na[FESANE] (a) and Na[Cl₆-FESANE] (b) in 0.1 M PB pH 7.0 solution (black curve) and 0.1 M PB pH 7.0 solution + 0.4 M NaCl (grey curve) at a CT-dsDNA/AuSPE. Scan rate: 100 mV s⁻¹.